

DP 305851

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TEMPERATURE COMPENSATION
FOR MAGNETORHEOLOGICAL FLUID DAMPERS

ABSTRACT OF THE DISCLOSURE

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A temperature compensation method for controlling a damping force of a magnetorheological (MR) damper is disclosed. First, a base operating current as a function of a desired force level of a damping force of the MR damper is determined, and a temperature compensation as a function of an operating temperature of the MR damper is determined. Finally, the temperature

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compensation is applied to the base operating current to generate a compensated operating current as a function of the desired force level of the damping force and the operating temperature of the MR damper. To refine the compensated operating current, the temperature compensation can be determined as both a function of the operating temperature of the MR damper and a relative velocity of the MR damper.